

REMARKS

The Applicant has included legible copies of the two crossed-out references cited in the Information Disclosure Statement that were not made of record. A copy of the original Information Disclosure Statement is also included.

Election/Restriction

During a telephone conversation with the Examiner on December 16, 2002 a provisional election was made with traverse to prosecute the invention of group 1, claims 8-23. In the Office Action of December 20, 2002 a two-way restriction was noted. The Applicant affirms in this response the selection of Group I (Claims 8-23) for response and has cancelled without prejudice the remaining group of claims. Applicant reserves the right to pursue the cancelled claims through a divisional application.

CLAIMS
1-7
Cancelled
GPT
4/8/03

Objections

The drawings are objected to under 37 CFR 1.83(a) as not showing the claim 19-23 details, in particular the "printed circuit board" of claim 20 and the "indirect contact" of claim 19. Figure 2 has been amended to include the printed circuit board 85. Claim 20 has been amended to: "An IC package according to claim 13, wherein the first surface is coated with a metal." The first surface of the heat spreader coated with a metal 25 is shown in amended Figures 1 and 2. Support for this amendment is in paragraph [0027] of the specification.

Claim Rejections - 35 U.S.C. § 112

The Examiner has rejected claims 10 and 19-23 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Claims 10 and 19 have been amended to particularly point out and distinctly claim the subject matter that the Applicant regards as the invention. The printed circuit board of Claim 20 is now shown in the figures as amended. Therefore, the Applicant respectfully submits that Claim 20 and Claims 21-23 depending on Claim 20 are no longer indefinite.

Claim Rejections – 35 U.S.C. § 102/103

Claims 8-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by either Gregory (U.S. Patent No. 4,858,073) or Novotny et al. (U.S. Patent No. 6,462,410). The Applicant respectfully traverses. Neither Gregory nor Novotny teach the Applicant's claimed elements of a heat spreader abutting an IC die and of the heat spreader having a coating of organic surface protectant. In contrast, Gregory teaches a heat sink coated by an organic plastic coating that does not abut an IC die, and the heat spreader taught by Gregory is not coated by an organic surface protectant. Similarly, Novotny teaches a heat sink that may be coated with a plastic coating that does not abut an IC die and the heat dissipation structure that optionally includes a heat spreader in Novotny is not coated by an organic surface protectant. Therefore, the Applicant respectfully submits that Claims 8-10 are not anticipated by Gregory or Novotny.

Claims 12-17, 19 and 20-23 are rejected under 35 U.S.C. 103(a) s being unpatentable over Gregory or Novotny et al. The Applicant respectfully traverses. Neither Gregory nor Novotny, in combination or individually, teach all elements claimed by the Applicant. The

cited references do not teach the elements of a heat spreader abutting an IC die and of the heat spreader having a coating of organic surface protectant as claimed in independent claims 8, 13, and 20. Because Claim 12 depends on Claim 8, Claims 14-17 and 19 depend on Claim 13, and Claims 22-23 depend on independent Claim 20, the limitations of the independent claims are incorporated into the dependent claims. Therefore the Claims 12-17, 19 and 20-23 are not obvious in light of Gregory or Novotny.

Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Gregory or Novotny et al. taken with either the Solberg "Impact" publication or the Kester OSP Coating 2001 publication. The Applicant respectfully traverses. Gregory or Novotny taken together with Solberg or Kester do not teach all elements claimed by the Applicant, either in combination or individually. The cited references do not teach the elements of a heat spreader abutting an IC die and of the heat spreader having a coating of organic surface protectant as claimed in independent claims 8 and 13. Because Claim 11 depends on Claim 8 and Claim 18 depends on independent Claim 13, the limitations of the independent claims are incorporated into the dependent claims. Therefore the Claims 11 and 18 are not obvious in light of Gregory or Novotny taken together with the Solberg publication and the Kester OSP Coating publication.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

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